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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,382	07/18/2003	David A. Southard	3195.1002-001	4377
21005	7590	09/22/2005		
HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133			EXAMINER GIBSON, ERIC M	
			ART UNIT	PAPER NUMBER
			3661	

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/622,382	<b>Applicant(s)</b> SOUTHARD ET AL.	
	<b>Examiner</b> Eric M. Gibson	<b>Art Unit</b> 3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-19 and 21-25 is/are rejected.
- 7) ☒ Claim(s) 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-15, drawn to a computer implemented method for creating minimal data representing an image, classified in class 382.
  - II. Claims 16-25, drawn to delivering weather images through satellite to an aircraft, classified in class 701, subclass 3.

2. The inventions are distinct, each from the other because of the following reasons:
  - a. Inventions I and II are related as combination and subcombination.

Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the method of delivering weather images does not require the particulars of the image formation claimed in claims 1-15. The subcombination has separate utility such as image processing.

- b. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper and further, because the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper and is hereby made final.

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3. Claims 1-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group. Election was made **without** traverse in the reply filed on 2/4/2005.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 16-19 and 21-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Robinson et al. (US006381538B1).

a. Per claim 16, Robinson teaches a computer implemented method of delivering graphical weather images through a satellite to an aircraft en route (see figure 3) comprising the step of automatically transmitting an updated graphical weather image for display to the aircraft based on flight plan (column 7, lines 15-20).

b. Per claim 17, Robinson teaches that the image is transmitted upon detecting relevant weather (column 11, line 42).

c. Per claim 18, Robinson teaches a computer implemented method of delivering graphical weather images through a satellite to an aircraft en route (see figure 3) comprising the steps of determining an expected position of an aircraft based on a flight plan (column 6, line 64 – column 7, line 1) and automatically transmitting an

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updated graphical weather image for display to the aircraft based on flight plan (column 7, lines 15-20).

d. Per claim 19, Robinson teaches that the image is transmitted based on severity of the weather (column 11, lines 17-43).

e. Per claim 21, Robinson teaches that the image is computed based on the expected position of the aircraft (column 7, lines 15-18).

f. Per claim 22, Robinson teaches that the update can be implemented at predetermined intervals (column 11, line 41).

g. Per claim 23, Robinson teaches sending GPS data to a ground station (column 6, line 64 – column 7, line 1).

h. Per claim 24, Robinson teaches that the image indicates relevant weather and is delivered based on the severity of the weather (column 11, lines 17-43).

i. Per claim 25, Robinson teaches that the entire purpose of the invention is to provide a unique graphical image of the weather data pertaining to the individual aircraft, rather than general weather information (see column 3, lines 3-9).

### ***Allowable Subject Matter***

5. Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

a. Per claim 20, the prior art does not teach or reasonably suggest in combination the claimed method wherein the updated graphical weather image is

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created by dividing a source image into a grid of cells, selecting a color for each cell corner based on sampling an area defined by the cell corner, and storing an indication of the selected color in an array dependent on the coordinates of the cell corner in the source image as claimed. See also applicant's discussion of the limitations of claim 20 in the reply filed 6/29/2005.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 16-19 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gremmert et al. (US006828922B1) teaches a synthetic airborne hazard display. Robinson et al. (US006650972B1) teaches an estimation, transmission, receipt, and presentation of vehicle specific environmental conditions and hazards information. Robinson (US006154143A) teaches a portable meteorological information system. Cline et al. (US004642775A) teaches an airborne flight planning and information system.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

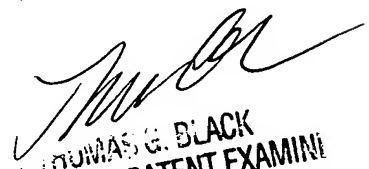
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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric M. Gibson whose telephone number is (571) 272-6960. The examiner can normally be reached on M-F. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EMG



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